HAMPTON VA

FLOOD MITIGATION PROJECT

Photographs of the House

Property Address: 114 Briarwood Drive

Property Owner:

Front

Back

Left side

Right side

114 BRIARWOOD DRIVE

ENGINEERING CONCEPTS, INC. "Creating Success"

20 S Roanoke Street, PO Box 619 Fincastle, VA 24090 540.473.1253 Fax 540.473.1254

U.S. DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY
National Flood Insurance Program

ELEVATION CERTIFICATE

IMPORTANT: Follow the instructions on pages 1–9.

OMB No. 1660-0008
Expiration Date: July 31, 2015

SECTION A – PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

A1. Building Owner's Name: Sylvinia Crystal Spear — Policy Number:

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 114 Briarwood Drive — Company NAIC Number:

City: Hampton — State: VA — ZIP Code: 23666

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.): Lot 15 Block C Briarwood Terrace

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): RESIDENTIAL

A5. Latitude/Longitude: Lat. 37°01'34.7" Long. W76°24'43.5" Horizontal Datum: ☐ NAD 1927 ☑ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number: 3

A8. For a building with a crawlspace or enclosure(s):
- a) Square footage of crawlspace or enclosure(s): 334 sq ft
- b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade: 2
- c) Total net area of flood openings in A8.b: 144 sq in
- d) Engineered flood openings? ☐ Yes ☒ No

A9. For a building with an attached garage:
- a) Square footage of attached garage: N/A sq ft
- b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade: —
- c) Total net area of flood openings in A9.b: — sq in
- d) Engineered flood openings? ☐ Yes ☐ No

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number		B2. County Name	B3. State
Hampton 515527		Independent City	VA

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
0118	G	08/16/2011	08/16/2011	AE	9.0'

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:
☐ FIS Profile ☑ FIRM ☐ Community Determined ☐ Other/Source:

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☑ NAVD 1988 ☐ Other/Source:

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☑ No
Designation Date: ___/___/___ ☐ CBRS ☐ OPA

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☑ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.
Benchmark Utilized: E-2 CITY OF HAMPTON, VA Vertical Datum: NAVD 1988
Indicate elevation datum used for the elevations in items a) through h) below. ☐ NGVD 1929 ☑ NAVD 1988 ☐ Other/Source:
Datum used for building elevations must be the same as that used for the BFE.

		Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	7.7	☑ feet	☐ meters
b) Top of the next higher floor	10.7	☑ feet	☐ meters
c) Bottom of the lowest horizontal structural member (V Zones only)	N/A	☐ feet	☐ meters
d) Attached garage (top of slab)	N/A	☐ feet	☐ meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	9.7	☑ feet	☐ meters
f) Lowest adjacent (finished) grade next to building (LAG)	7.9	☑ feet	☐ meters
g) Highest adjacent (finished) grade next to building (HAG)	7.4	☑ feet	☐ meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	7.2	☑ feet	☐ meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

☒ Check here if comments are provided on back of form. ☐ Check here if attachments.

Were latitude and longitude in Section A provided by a licensed land surveyor? ☑ Yes ☐ No

Certifier's Name	License Number	
WARD M. HOLMES	1403A	
Title: LAND SURVEYOR	Company Name: WARD M. HOLMES LAND SURVEYOR, P.C.	
Address: 9225 GRANBY STREET	City: NORFOLK	State: VA ZIP Code: 23503
Signature:	Date: 3-4-15	Telephone: (757) 480-1230

COMMONWEALTH OF VIRGINIA — PLACE SEAL — WARD M. HOLMES Lic. No. 1403 — 3-4-15 — LAND SURVEYOR

FEMA Form 086-0-33 (Revised 7/12) — See reverse side for continuation. — Replaces all previous editions.

15-174

COMMONWEALTH OF VIRGINIA — JASON SCOTT CALDWELL — Lic. No.046713 — 06/15/16 — PROFESSIONAL ENGINEER

ENGINEERING CONCEPTS, INC.
20 S. ROANOKE ST., PO BOX 619
FINCASTLE, VIRGINIA 24090
540.473.1253 FAX: 540.473.1254

Drawn: MSMj	114 BRIARWOOD DRIVE COVER SHEET	SCALE: NONE	
Designed: ECI		DATE: MAR 11, 2015	
Checked: JSC	FLOOD MITIGATION CITY OF HAMPTON VIRGINIA	PROJECT: 14142	
Approved: JSC		C1	

(PS) PERMANENT SEEDING

PS1 – AS REQUIRED:
SURFACE ROUGHENING, SOIL AMENDMENT AND CONDITIONING, LIME AND FERTILIZER APPLICATION AND INCORPORATION, SEEDING – TYPE AND APPLICATION, RE-SEEDING, AND MULCHING TO BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL TECHNICAL BULLETIN 4, OR LATEST EDITION.

EROSION AND SEDIMENT CONTROL NOTES:

ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.

ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.

ES-4 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

ES-7 ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

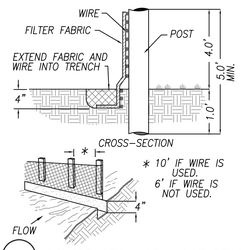
ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.

ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

ES-10 THE CONTRACTOR SHALL CLEAN SEDIMENT FROM THE SEDIMENT BASINS AND TRAPS WHEN SEDIMENT BUILDUP REACHES CLEANOUT ELEVATION.

ES-11 A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE LOCAL PROGRAM ADMINISTRATOR OR HIS DESIGNATED AGENT, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.

ES-12 AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY E&S CONTROLS SHALL BE CLEANED UP AND REMOVED.



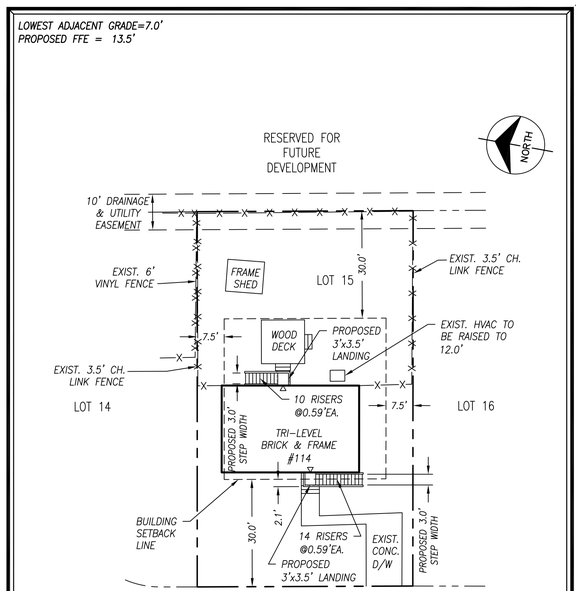
(SF) CONSTRUCTION OF A SILT FENCE

(ES) CONSTRUCTION ENTRANCE

EXISTING DRIVEWAY SHALL BE USED AS THE CONSTRUCTION ENTRANCE.

HAMPTON VA

FLOOD MITIGATION PROJECT



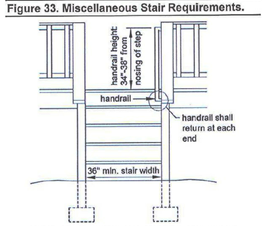
▷ INDICATES DOOR

NOTE: BASE INFORMATION FROM SURVEY BY WARD M. HOLMES LAND SURVEYOR, P.C.

ENGINEERING CONCEPTS, INC. 20 S. ROANOKE ST., PO BOX 619 FINCASTLE, VIRGINIA 24090 540.473.1253 FAX: 540.473.1254	DECK DETAIL PLAN 114 BRIARWOOD DRIVE HAMPTON, VA	SCALE:1"=20' APRIL 13, 2016 PROJECT NO. 14142

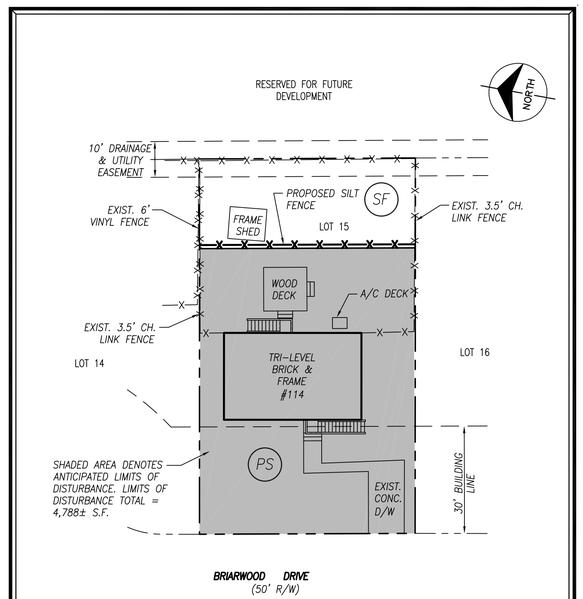
NOTES:
1. ALL DECKS/LANDINGS AND STEPS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE CITY OF HAMPTON 2012 RESIDENTIAL DECK HANDOUT WHICH IS BASED ON THE 2012 VIRGINIA RESIDENTIAL CODE.
2. EXISTING PORCHES/DECKS, IF ELEVATED, SHALL MEET THE STANDARDS OF THE CITY OF HAMPTON 2012 RESIDENTIAL DECK HANDOUT WHICH IS BASED ON THE 2012 VIRGINIA RESIDENTIAL CODE. (FOR EXAMPLE RAILINGS, PICKETS, CONNECTIONS TO THE EXISTING STRUCTURE, ETC. SHALL BE PER CODE)

Figure 33. Miscellaneous Stair Requirements.



SOURCE: CITY OF HAMPTON 2012 RESIDENTIAL DECK HANDOUT

TYPICAL STEP DETAIL
SCALE: NTS



NOTE: BASE INFORMATION FROM SURVEY BY WARD M. HOLMES LAND SURVEYOR, P.C.

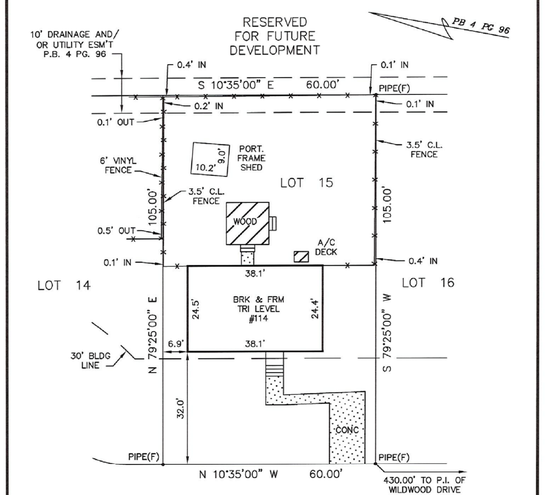
ENGINEERING CONCEPTS, INC. 20 S. ROANOKE ST., PO BOX 619 FINCASTLE, VIRGINIA 24090 540.473.1253 FAX: 540.473.1254	DISTRUBANCE MAP 114 BRIARWOOD DRIVE HAMPTON, VA	SCALE:1"=20' APRIL 13, 2016 PROJECT NO. 14142

NOTES:
1. TOTAL EXISTING IMPERVIOUS AREA = 1,514± S.F.
   TOTAL PROPOSED IMPERVIOUS AREA = 1,599± S.F.
2. PARCEL LIES OUTSIDE OF THE CHESAPEAKE BAY PRESERVATION AREAS BASED ON GRAPHICAL PLOTTING AS SHOWN ON HAMPTON CITY GIS.
3. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN PROPER PERMITS AND, WHEN APPLICABLE, SHALL PERFORM ENVIRONMENTAL SITE ASSESSMENT AS DEFINED BY THE CITY OF HAMPTON TO DETERMINE THE PRESENCE OR ABSENCE OF WETLANDS IN THE WORK AREA.
4. PROJECT TO ELEVATE EXISTING HOUSE. CONTRACTOR SHALL DISCONNECT, EXTEND, AND RECONNECT UTILITIES. EXISTING SEWER CLEANOUTS AND WATER METERS TO REMAIN.
5. EXISTIING DRIVE SHALL BE THE VEHICLE AND CONSTRUCTION ENTRANCE.
6. SPLASH GUARDS SHALL BE PLACED AT ALL ROOF DRAINS.
7. ROOFTOP DISCONNECTS SHALL BE ADDED FOR STORMWATER QUALITY. THESE SHALL INCLUDE A 5' SECTION OF GUTTER EXTENSION EXTENDING AWAY FROM THE HOUSE.

THIS IS TO CERTIFY THAT I, ON MAR. 4, 2015, SURVEYED THE PROPERTY SHOWN HEREON AND THAT THE TITLE LINES AND PHYSICAL IMPROVEMENTS ARE AS SHOWN HEREON. THE IMPROVEMENTS STAND STRICTLY WITHIN THE TITLE LINES AND THERE ARE NO ENCROACHMENTS OF OTHER BUILDINGS EXCEPT AS SHOWN.

SIGNED: Ward M. Holmes

NOTES:
1) THE PROPERTY SHOWN HEREON APPEARS TO LIE IN "AE" (9.0) FLOOD ZONE ACCORDING TO F.E.M.A. MAP PANEL NO. 515527-0118G REVISED AUG. 16, 2011.
2) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT, AND MAY NOT SHOW ANY/ALL EASEMENTS AFFECTING THE PROPERTY.



PHYSICAL SURVEY
OF
LOT 15, BLOCK C
BRIARWOOD TERRACE
HAMPTON, VIRGINIA
FOR
SYLVINIA CRYSTAL SPEAR

DATE: MAR. 4, 2015
SCALE: 1" = 20'
NOTE: FOR PLAT SEE P.B. 4 PG. 96 HAMPTON, VA

COMMONWEALTH OF VIRGINIA
WARD M. HOLMES
LIC. No.1403
LAND SURVEYOR

WARD M. HOLMES
LAND SURVEYOR, P.C.
9225 GRANBY STREET
NORFOLK, VIRGINIA 23503
757-480-1230

DRAWN BY: WTL
PROJECT NO. 15-174
943/31
(2799)

COMMONWEALTH OF VIRGINIA
JASON SCOTT CALDWELL
Lic. No.046713
06/15/16
PROFESSIONAL ENGINEER

ENGINEERING CONCEPTS, INC.
20 S. ROANOKE ST., PO BOX 619
FINCASTLE, VIRGINIA 24090
540.473.1253 FAX: 540.473.1254

Drawn MSMj	114 BRIARWOOD DRIVE SURVEY SHEET	SCALE: NONE
Designed ECI		DATE: APRIL 13, 2016
Checked JSC		PROJECT: 14142
Approved JSC	FLOOD MITIGATION CITY OF HAMPTON VIRGINIA	C2

01010 _ SUMMARY OF WORK

PART 1 _ GENERAL

Section Includes:

1. Project description.
2. Definitions
3. Regulatory requirements.
4. Access to the site and use of the premises.
5. Preconstruction meeting.
6. Coordination.
7. Controls

1.1 PROJECT DESCRIPTION

A. The Public Body is: The City of Hampton, City Hall Building, 22 Lincoln Street Hampton, Virginia 23669.

B. The property is located at: 114 Briarwood Drive, Hampton, Virginia, 23666

C. The residence has crawl space and slab construction.

D. The residence has asbestos siding. The Contractor shall adhere to OSHA requirements if the asbestos siding is disturbed.

E. The residence has no known chimneys.

F. The existing top of the lowest floor is 7.7 feet. The base flood elevation (BFE) of the property is 9.0 feet. The City of Hampton current freeboard requirement is 3.0 feet. The Design Flood Elevation is 12.0 feet (BFE + Freeboard). The floor section is approximately 1.5 feet (Contractor to verify once house is raised). The house is split-level, there was no evidence of ductwork in the slab section which will be the lowest level to which the house is raised. The house will be raised approximately 5.8 feet with a final finished floor elevation of 13.5 feet. The top of block shall be at or above the Design Flood Elevation and when lowered, the bottom of the floor section (and any ductwork or utilities if present), shall be above the Design Flood Elevation , or any portion of the floor section, to include ductwork and utilities that is below the Design Flood Elevation shall be comprised of flood resistant materials in accordance with Virginia Unified Statewide Building Code and as defined by FEMA Technical Bulletin 2, (August 2008) Flood Damage – Resistant Materials Requirements.

G. This property is not located within the Chesapeake Bay Preservation Area.

H. As part of the designs, the Contractor will be supplied with a pre-project elevation certificate. A post-project elevation certificate will also be provided. The Contractor shall be responsible for obtaining a construction elevation certificate verifying the top of block, for the City's approval, at the foundation inspection, prior to lowering the house. The construction elevation certificate shall be at the Contractor's expense.

I. Per Federal Emergency Management Agency (FEMA) guidelines: When the cost of proposed replacement material for a damaged component is more than the original material, the proposed material must be shown to be cost effective. Additionally, if due to unique character or age, like materials cannot be located, the most cost effective option of the best available match will be utilized and the Homeowner shall be consulted in this process. If the Homeowner elects an option that is not the most cost effective option, any additional work or materials cost shall be at the Homeowner's expense (to be approved and coordinated by the Construction and Project Managers) and must not affect the overall schedule.

J. The Contractor shall provide pre-treated lumber landings with pre-treated lumber stairs to grade at the two existing exterior doors, in accordance with Hampton 2012 Residential Deck Handout, 2012 Virginia Residential Code and International Residential Code and per the design plans provided.

K. The work consists of:

1. Turn-key elevation of the house, including all necessary site work, grading, foundation and footer installation and modifications, access and egress modifications, and utility extensions. Adjacent properties shall not be affected by stormwater runoff from the proposed structure(s) impervious cover and drainage patterns.
2. All work is to be performed to meet all applicable city and state building codes and in accordance with State and Federal Program regulations.
3. The Contractor shall be responsible for obtaining permits in accordance with the policies and requirements of the City.
4. The Contractor shall possess a valid Class A, Virginia contractor's license, shall comply with all requirements of the Invitation to Bid, and the Contractor or Sub-Contractor performing the actual house lifting shall have a minimum of 5 years' experience with the elevation of homes and have elevated at least 5 homes in the past 5 years.
5. The Contractor shall utilize the design plans provided and shall submit the provided plans as part of the application for building permits. If the Contractor proposes to alter or modify the plans in any way, the proposed change(s) shall be specified, in detail, as an attachment to the bid document, with reason for the proposed change in design and accompanied by detailed estimation of cost savings or increases that would be realized as a result of incorporating the Contractor recommended design change. If approved, the Contractor shall be responsible for obtaining and paying for any engineering services required to modify existing plans or commission new plans and shall submit the new plans when applying for required permits.
6. The Contractor shall be bound by the design plans approved by the City in the permitting process. In the event the Contractor encounters unforeseen issues that require deviation from the approved design plan (e.g., severe structural termite damage, hidden chimney, poor soil conditions, undocumented duct work, etc.,), the Contractor shall cease work and report the condition to the Construction Manager. If the work is outside of the existing design plan and permitting is required, the Contractor will submit a modified, or new, design plan for approval before resuming work.
7. As part of the designs, the Contractor will be provided access to the July 1, 2015 "Report of Subsurface Investigation and Geotechnical Engineering Services" by GET Solutions, specific to this property. The Contractor shall review the report and shall follow the recommendations put forth in the report. The Contractor shall provide, at the Contractor's expense, an inspection of the excavated foundation, by a certified Geotechnical Engineering firm prior to beginning work on the new foundation.
8. The work shall further include, but not be limited to:

a) Elevation

1) Elevate existing structure, including additions to home, enclosed porches, and porch roof, but excluding all detached structures. Contractor shall determine if removal of structures such as porches or decks is less expensive and if so, shall bid in that manner and so indicate in the bid response.
2) Houses with a brick exterior shall be elevated with brick only if it is the most cost effective for the exterior of the house. Contractor shall provide 12" CMU to support brick. Otherwise brick shall be removed and disposed of properly and builder grade vinyl siding, along with vented soffit shall be installed. Color to be selected by Homeowner. If it is known that the brick will be removed, the Contractor shall so indicate in the bid response; otherwise if it is discovered during construction that the brick cannot be elevated, the Contractor shall notify the Construction Manager for coordination with the City and the Homeowner before work proceeds.
3) Provide new pressure treated, minimum 0.4 CCA ground contact sill plate for entire structure.
4) Extend downspouts to grade and provide pre-cast concrete splash blocks.
5) Structure shall be vacant during all construction activity that involves the elevation of the home.
6) Any interior floors that are damaged beyond repair, as a result of this work, or that are newly constructed to replace slab floors, shall be replaced with wooden floor joists and plywood flooring with a vinyl covering, as required by code.
7) Remove and dispose offsite at a legal landfill all debris generated from this work from the yard, landscaped areas, or any other portions of the property.
8) Any construction material located below the Design Flood Elevation (Base Flood Elevation + 3.0' of Freeboard) shall be flood resistant materials as defined by FEMA TB-2.
9) The Contractor shall be responsible for a "during construction" elevation certificate to the top of block, for the City's approval at the foundation inspection, before the house is lowered. This shall be submitted to the City and Construction Manager.
10) The design engineer shall provide the final post elevation certificate.

b) Foundation

1) Install new construction, continuous masonry wall foundation, (see structural drawings), and interior masonry piers up to new structure elevation. Provide termite shields on new foundation walls and piers. (See structural drawings). Provide new interior CMU pilasters with reinforced concrete footings as indicated on the plan.
2) Reinforcing shall be in accordance with the design drawings.
3) Home shall be properly secured to foundation; per applicable city and state codes.
4) Provide a "during construction" elevation certificate, verifying top of block, to the City at the foundation inspection. The top of block elevation certificate shall be at the Contractor's expense.
5) Provide written documentation, to the Construction Manager, verifying geotechnical inspection of the excavated foundation prior to beginning work on the new foundation.
6) Interior crawl space openings, as shown on the design plan, shall not be equipped with any type of door or covering and shall remain permanently open.
7) Contractor shall install a 6 mil. Class 1 Vapor Retarder, within the crawlspace. Overlapping and taping all seams per applicable codes.

c) Vents

1) Provide foundation vents and flood vents as required by code. Flood vents shall be Engineer Certified Smart Vent or an approved equal and must comply with all aspects of the current edition of relevant FEMA publications (i.e., FEMA Technical Bulletin 1, August, 2008: "Openings in Foundation Walls and Walls of Enclosures"). All flood vents shall be located within 12 inches of the adjacent grade per the design plan.
2) Flood vents for this property are based on graphical scaling of the survey. Assessing approximately 935 square feet of crawl space, using 200 square feet coverage provided by the vents specified herein – requires a total of 5 flood vents.
3) Engineered flood vents are required and shall be Smart Vent providing 200 square feet of crawl space coverage per vent; or shall be an approved equal.
4) At the time of permitting, if the type of flood vent or vent location the Contractor intends to use differs from that specified in the plan, the Contractor must submit an ICC-ES report as well as a modified design plan that specifies the number of vents to be used, location of vents and the calculations used to determine the number of vents needed. In the event that an ICC-ES report does not exist, the Contractor must submit written evaluation specific to this address, from an engineer licensed in Virginia, and which specifies the number of required vents, a modified design plan and elevations showing vent placement, and the calculations used to determine the number of vents.
5) Flood vent doors that release shall be anchored inside of the foundation.
6) Air vents shall be placed on exterior walls per code requirements. The vents provided shall have bug screens. The number of vents and their locations shall conform to the structural drawings.
7) Provide one new crawl space access door per crawl space area. Provide steel or masonry lintels at all masonry openings greater than 8" X 16".
8) Crawl space area is defined by FEMA as to the exterior of the walls.

d) Decks, Porches, Stoops Etc.

1) All existing wooden decks, stoops, porches, etc. shall remain and be elevated unless required to be removed for construction or code issues. The Contractor shall specify in the bid if it is known that any decks, porches, stoops, patios, concrete walkways or other such components are to be removed as part of the work. In the event that the requirement for removal is not found until construction has started, the Contractor will consult with the Construction Manager and Homeowner prior to removal.
2) The Contractor shall construct landings, stairs and railings according to the design plans. If any deviation to the provided plans is proposed, such changes shall be specified as part of the bid submitted.
3) Provide ground access to wood porches, stairs, and railings.
4) All construction shall stay within the property setback limits and meet all applicable code requirements.
5) Platforms and stairs shall be constructed per the City of Hampton Deck Handout. 2012 Virginia Unified Statewide Building Code and International Residential Code as referenced in the 2012 Virginia Unified Statewide Building Code.
6) Existing landings and porches which the Contractor chooses to elevate as part of this project shall be brought up to code at the Contractor's expense. This includes but is not limited to: connections to the existing structure, pickets, railings, post sizes.

e) Site

1) All driveways shall remain intact and undamaged as a result of this construction. Any walkways that are not removed to provide new landings and stairs shall remain intact and undamaged as a result of this construction. Any functional walkways(s) or any driveways that are damaged shall be replaced with standard asphalt or concrete to pre-construction dimensions at Contractor's expense. No new walkways shall be constructed to meet new landings and stairs.
2) Any fencing that is removed for construction shall be placed back in the same condition as before construction.
3) All landscaping shall remain as it currently exists unless required to be removed for construction. The Contractor shall coordinate removal of landscaping with Homeowner prior to removal. The property shall be restored to pre-existing conditions in regards to the Contractor replanting any vegetation the Contractor / Homeowner moved prior to construction. The complete replanting of flower beds, etc. is the responsibility of the Homeowner.
4) Public roadways shall be kept free of debris and sediment.
5) The Contractor shall be responsible for Right of Way Permit and proper fees to the City and VDOT for the placement and usage of a trash receptacle in the street.

f) Crawl Space General Requirements

1) Insulation at underside of floor is required per code. If it is damaged as a result of work performed on this project it must be replaced at the Contractor's expense. If no insulation exists in an existing crawl space, the Homeowner shall bear responsibility for cost, Contractor to install. Floor insulation shall have a minimum value of R19.
2) Contractor shall provide sand/fill dirt under the house in accordance with requirements set forth in FEMA Technical Bulletin 1, August 2008: "Openings in Foundation Walls and Walls of Enclosures."

g) Slab General Requirements

1) Slab homes and slab portions of homes shall not be raised with the structure unless the Contractor submits detailed engineering plans, at the Contractor's expense, that certify the safety and feasibility of the proposed design as well as a detailed cost analysis of the Contractor's bid comparing raising the slab versus disconnecting the slab and which must demonstrate an overall cost savings.
2) Insulation at the underside of all floors is required per code. For slab areas, the Contractor is responsible, at the Contractor's expense, for insulating the bottom of the elevated structure with insulation meeting state and local requirements. Floor insulation shall have a minimum value of R19.
3) All new interior floor coverings shall be vinyl.
4) Kitchen Cabinets and appliances shall be removed by the contractor and stored at the Contractor's expense. The Contractor shall ensure that appliances and cabinets are not damaged during demolition or storage. The appliances and cabinets shall be reinstalled in the same condition and layout. In the case that the appliances or cabinets are not able to be re-used due to damage during the project, the Contractor shall provide economy grade replacements/materials, at the Contractor's expense. If cabinets or appliances are not functional due to existing condition or age, replacement will be at the Homeowner's expense – to be coordinated by the City.
5) Tubs, toilets, showers, vanities and cabinets shall be removed by the Contractor and stored at the Contractor's expense. The Contractor shall ensure that bathroom fixtures and furnishings are not damaged during demolition or storage. Bathroom fixtures and furnishings shall be reinstalled in the same condition and layout. Existing toilets shall be installed with new wax rings. In the event that tubs, toilets, showers, vanities or cabinets are not able to be reused, or are damaged during the project, the Contractor shall provide economy grade replacements/materials, at the Contractor's expense. Replacement showers and tubs shall be fiberglass.
6) Utility Room appliances and fixtures shall be removed by the contractor and stored at the Contractor's expense. The Contractor shall ensure that appliances and fixtures are not damaged during demolition or storage. The appliances and fixtures shall be reinstalled in the same condition and layout. In the case that the appliances or fixtures are not able to be re-used due to damage during the project, the Contractor shall provide economy grade replacements/materials, at the Contractor's expense. If fixtures or appliances are not functional due to existing condition or age, replacement will be at the Homeowner's expense – to be coordinated by the City.
7) Damage to the existing walls shall be repaired with sheet rock, finished, sanded, and primed white. Decorative painting or wall finishes shall be the Homeowner's responsibility.
8) Base trim and door trim replacement shall be the responsibility of the Contractor. Replacement shall be builder grade materials
9) Contractor shall adjust existing doors for proper function.

h) Utilities

1) Contractor to extend all utilities (water, sewer, cable, phone, gas etc.) with the house. Electric meter base shall be located as per applicable codes and coordinated with utility company. Contractor coordinates disconnection and re-connection with utility companies. Any work to bring utilities up to current code (e.g. HVAC unit too close to residence) shall be at the Homeowner's expense – to be coordinated by the City.
2) Contractor shall raise all heat pumps/HVAC units (including exterior units) so that the bottom of the unit is at the same elevation as the new finished floor. Provide pressure treated (0.40 CCA) wood platform and posts to support the units where necessary.
3) Design plans specify if ductwork is located in the crawl space and provides elevation to ensure that ductwork is elevated at or above the Design Flood Elevation. If the Contractor encounters HVAC ductwork or other qualifying utilities (e.g., electrical, plumbing) below the Design Flood Elevation then the Contractor shall not lower the house and shall contact the Construction Manager. Contractor shall replace any and all damaged HVAC ductwork that is damaged as a result of this construction at his/her expense. Contractor shall ensure that the heating and cooling systems perform to their pre-construction conditions at the completion of the work.
4) Contractor shall provide insulation on all exposed water lines, even if there was no insulation before. Insulation shall have a minimum R valve of 20.
5) Repair of pre-existing conditions above the sill plate; unless specifically indicated is not part of this project's scope. For example rotten floor joists, utility problems, existing cracks in walls, etc. If immediate repair is required to proceed with the project, the Contractor shall notify the Construction Manager, in writing, to include a cost estimate and shall await approval before continuing work. The Construction Manager shall coordinate with the City and the Homeowner to secure Homeowner payment. If repair is not required to continue with the project, or to comply with codes or ordinances, the Contractor shall bring the problem to the attention of the Homeowner.

1.2 DEFINITIONS

A. Install: To put products in place in the work ready for the intended use, including unloading, unpacking, handling, storing, assembling, installing, erecting, placing, applying, anchoring, working, finishing, curing, protecting, cleaning, and similar operations.
B. Provide: To furnish and install products.
C. Indicated: Shown, noted, scheduled, specified, or drawn, somewhere in the contract documents.
D. Required: Necessary to satisfy the provisions of the contract documents and/or applicable regulations.

1.3 REGULATORY REQUIREMENTS

A. All work will be performed in accordance with the governing regulations. The following regulations are applicable to this project:
1. The International Residential Code, as referenced in the 2012 Virginia Unified Statewide Building Code.
2. The Virginia Department of Transportation Road and Bridge Specifications, Current Edition.
3. The Virginia Department of Transportation Road and Bridge Standards, Volumes I & II, Current Edition.
4. Virginia Department of Health Waterworks Regulations, Current Edition.
5. Virginia Department of Health Sewage Collection and Treatment Regulations, Current Edition.
6. Virginia Department of Health Sewage Handling and Disposal Regulations, Current Edition.
7. Virginia Erosion and Sediment Control Handbook, Current Edition
8. 2012 City of Hampton Deck Handout
9. FEMA regulations
10. City of Hampton ordinances and codes

B. Other regulations may also be applicable.

1.4 ACCESS TO THE SITE AND USE OF THE PREMISES

A. The space available to the Contractor for the performance of the work, either exclusively or in conjunction with others performing other construction as part of the project, is limited to the existing property on which the house is located and the proposed relocation property (where applicable).
B. Other areas are off limits to all construction personnel, including vehicular access and parking.

1.5 PRECONSTRUCTION MEETING

A. A preconstruction meeting will be held at a time and place designated by the City, for the purpose of identifying responsibilities and explanation of administrative procedures.
B. An agenda will be provided.
C. The contractor should be prepared to discuss construction schedule.

1.6 COORDINATION

A. The Contractor shall keep the Construction Manager apprised of all issues related to the project; shall make timely notification to the Construction Manager of any problems incurred or delays anticipated and shall notify the Construction Manager of impending project milestones (e.g., house raising, raising completed, foundation completed, house to be lowered, etc.).
B. The Contractor shall, in a timely manner, supply the Construction Manager with copies of all permits, licenses, certificates of occupancy and similar permissions obtained to include receipts for fees paid.
C. Any "side deals" requested by the Homeowner, to the Contractor, for additional services shall be paid for by the Homeowner and shall not increase the timeline of the project. The Contractor shall provide the City a copy of any contract, and proof of payments, entered into with the Homeowner during the term of this project as a means for the City to prove to FEMA that grant funds were not expended on side deals.

1.7 CONTROLS

A. The Contractor will be responsible for establishing field controls for construction purposes.

END OF SECTION 01010

COMMONWEALTH OF VIRGINIA
JASON SCOTT CALDWELL
Lic. No.046713
06/27/16
PROFESSIONAL ENGINEER

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20 S. ROANOKE ST., PO BOX 619
FINCASTLE, VIRGINIA 24090
540.473.1253 FAX: 540.473.1254

FLOOD MITIGATION PROJECT

Drawn	114 BRIARWOOD DRIVE GENERAL NOTES	SCALE: NONE
Designed		6/27/2016
Checked JSC	FLOOD MITIGATION CITY OF HAMPTON VIRGINIA	PROJECT: 14142
Approved JSC		C3

GENERAL STRUCTURAL NOTES:

1. BEFORE PROCEEDING WITH ANY WORK WITHIN THE EXISTING FACILITY, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH EXISTING STRUCTURAL AND OTHER CONDITIONS. IF SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY BRACING, SHORING AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE EXISTING WORK IN A SAFE CONDITION DURING THE PROCESS OF CONSTRUCTION AND TO PROTECT THE EXISTING WORK FROM DAMAGE. SHORING INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES INCLUDING OSHA REQUIREMENTS.

2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS, ELEVATIONS, ETC. NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE WORK TO THE EXISTING WORK..

3. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS (IF DRAWINGS ARE APPLICABLE) THAT COMPRISE THE COMPLETE DOCUMENT SET FOR THIS PROJECT. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, ANCHORS, INSERTS, HANGERS, HOLES, ETC. TO BE PLACED IN THE STRUCTURAL WORK.

4. WHERE A SECTION OR DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY TO ALL LIKE AND SIMILAR CONDITIONS.

5. UNDER NO CIRCUMSTANCES SHALL THE CONTRACT DRAWINGS BE REPRODUCED AND USED AS SHOP DRAWINGS.

GENERAL NOTES:

1. THE STRUCTURE WAS DESIGNED IN ACCORDANCE WITH THE 2012 EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUSBC). THE FOLLOWING LOADS, IN ADDITION TO THE DEAD LOADS OF THE PERMANENT MATERIALS AND CONSTRUCTION, WERE USED.

ROOF LIVE LOAD. . . . . .20 PSF

FLOOR LIVE LOADS:
- LIVING AREAS. . . . . .40 PSF
- SLEEPING AREAS. . . . . .30 PSF
- ATTIC SPACE . . . . . .20 PSF

SNOW LOADS:
- GROUND SNOW LOAD. . . . . .Pg = 12 PSF
- SNOW IMPORTANCE. . . . . .Is = 1.0
- THERMAL CATEGORY. . . . . .Ct = 1.0 (HEATED)
- SNOW EXPOSURE FACTOR. . . . . .Ce = 1.0 (PARTIALLY EXPOSED)

WIND LOADS:
- BASIC WIND SPEED ULTIMATE (3 SECOND GUST). . . . . .115 MPH
- BASIC WIND SPEED NOMINAL (3 SECOND GUST). . . . . .90 MPH
- RISK FACTOR. II
- WIND EXPOSURE B

FOUNDATION NOTES:

1. THE FOUNDATIONS WERE DESIGNED FOR A MAXIMUM ALLOWABLE NET SOIL BEARING PRESSURE OF 1500 PSF. THE SOILS BENEATH THE PROPOSED FOOTINGS SHALL BE CAPABLE OF SAFELY SUPPORTING THIS LOAD WITHOUT EXCESSIVE SETTLEMENT. ANY UNUSUAL SOIL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER.

2. ELEVATIONS TO TOP OF ALL FOOTINGS SHALL BE SHOWN ON THE FOUNDATION PLAN. EXCAVATION DEPTHS ARE A MINIMUM AND SHALL BE LOWERED IF APPROVED BY THE ARCHITECT/ENGINEER TO OBTAIN THE DESIGN BEARING PRESSURE. CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT (IF APPLICABLE) PRIOR TO STARTING FOUNDATION CONSTRUCTION.

3. SOFT, AND OTHERWISE UNSATISFACTORY, SOILS BENEATH PROPOSED FOUNDATION ELEMENTS SHALL BE REMOVED AT THE DIRECTION OF THE ARCHITECT/ENGINEER AND BACKFILLED WITH PROPERLY COMPACTED MATERIALS.

4. EARTH FORMED FOOTINGS SHALL CONFORM TO THE SHAPE, LINES AND DIMENSIONS AS SHOWN ON THE FOUNDATION PLAN. BEFORE PLACING CONCRETE, ALL EMBEDDED ITEMS SHALL BE PROPERLY PLACED, ACCURATELY POSITIONED, AND MAINTAINED SECURELY IN PLACE.

5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT STORMWATER FROM ENTERING FOUNDATION EXCAVATIONS. ALL WATER SHALL BE REMOVED BEFORE DEPOSITING CONCRETE. CONCRETE SHALL NOT BE PLACED ON SOFT, SATURATED SOIL.

6. WALL FOOTINGS SHALL BE CENTERED ON THE WALLS AND COLUMN FOOTINGS SHALL BE CENTERED ON THE COLUMNS, UNLESS OTHERWISE NOTED.

7. PIPES SHALL NOT RUN THROUGH STANDARD FOOTINGS. STEP FOOTINGS FOR PIPES TO RUN ABOVE TOP OF FOOTING, UNLESS OTHERWISE NOTED. SEE PLUMBING DRAWINGS FOR PIPE LOCATIONS. MAINTAIN A MINIMUM OF 3 INCHES CLEARANCE FROM REINFORCING STEEL TO ALL PIPES.

STRUCTURAL STEEL NOTES:

1. STEEL SHAPES SHALL BE ASTM A36.

2. STEEL SHAL BE CATED WITH A PRIMER AND EPOXY TOP COAT.

CAST-IN-PLACE CONCRETE NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 301-11 "STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 318/318R-11 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

2. CONCRETE PROTECTION FOR REINFORCING STEEL AND OTHER GENERAL REQUIREMENTS OF PLACING AND FABRICATION OF REINFORCING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS" (ACI 318-11).

3. ALL CAST-IN-PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND ATTAIN AN ULTIMATE COMPRESSIVE STRENGTH OF 3,500 PSI AT AN AGE OF 28 DAYS.

CAST-IN-PLACE CONCRETE NOTES: (CONTINUED)

4. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60 DEFORMED BARS UNLESS OTHERWISE NOTED. ALL REINFORCING STEEL MARKED CONTINUOUS (CONT.) SHALL BE LAPPED 42 BAR DIAMETERS AT SPLICES (PER CHART BELOW), UNLESS OTHERWISE NOTED.

REQUIRED STEEL REINFORCING BAR LAPS IN CAST-IN-PLACE CONCRETE

BAR SIZE	BAR DIAMETER	X42 BAR DIAMETER	REQUIRED SPLICE
#3	0.375"	X42	15.75"
#4	0.500"	X42	21.00"
#5	0.625"	X42	26.25"
#6	0.750"	X42	31.50"

5. ALL WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A185 (FLAT SHEETS ONLY).

6. THE SLUMP OF CAST-IN-PLACE CONCRETE SHALL NOT EXCEED 4 INCHES WITHOUT A HIGH RANGE WATER REDUCING ADMIXTURE. THE SLUMP OF CAST-IN-PLACE CONCRETE WITH THE USE OF A HIGH RANGE WATER REDUCING ADMIXTURE SHALL NOT EXCEED 8 INCHES. ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED 5% TO 7%.

7. ALL REINFORCING STEEL AND EMBEDDED ITEMS SUCH AS ANCHOR BOLTS AND WELD PLATES SHALL BE ACCURATELY PLACED IN THE POSITIONS SHOWN AND ADEQUATELY TIED AND SUPPORTED BEFORE CONCRETE IS PLACED TO PREVENT DISPLACEMENT BEYOND PERMITTED TOLERANCES. "WET-SETTING" OF REINFORCING STEEL IS PROHIBITED.

8. MINIMUM CONCRETE COVER FOR PROTECTION OF REINFORCEMENT SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH . . . . . .3 INCHES

CONCRETE CAST AGAINST FORMWORK AND PERMANENTLY EXPOSED TO EARTH OR WEATHER . . . . . NO. 6 THROUGH NO 18. BARS . . . .2 INCHES
NO. 5 BAR AND SMALLER, W.W.F. . . .1 1/2 INCHES

CONCRETE CAST AGAINST FORMWORK AND NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH . . . . NO. 14 AND NO. 18 BARS . . . . . .1 1/2 INCHES
NO. 11 BAR AND SMALLER . . . . . .3/4 INCHES

9. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF CONCRETE MIX DESIGN AND TEST REPORTS. THE MIX DESIGN SHALL INCLUDE ALL PROPERTIES OF THE MIX, MATERIALS USED IN THE CONCRETE AND ACTUAL CONCRETE STRENGTH. SHOP DRAWINGS FOR CONCRETE REINFORCEMENT SHALL ALSO BE PROVIDED, INCLUDING REINFORCING AND WELDED WIRE FABRIC.

MASONRY NOTES:

1. ALL MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 530-11, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND ACI 530.1-11, "SPECIFICATIONS FOR MASONRY STRUCTURES."

2. ALL CONCRETE MASONRY UNITS SHALL BE IN ACCORDANCE WITH ASTM C-90 "SPECIFICATIONS FOR HOLLOW LOAD-BEARING UNITS" AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF F'M = 1500 PSI.

3. ALL MORTAR FOR USE IN ENGINEERED MASONRY BEARING WALLS SHALL BE IN ACCORDANCE WITH ASTM C-270 TYPE "S" MORTAR. ALL MASONRY GROUT SHALL BE IN ACCORDANCE WITH ASTM C476 AND SHALL OBTAIN A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.

4. PROVIDE DOWELS OUT OF FOOTING AT ALL EXTERIOR AND LOAD-BEARING MASONRY WALLS, PROVIDE STANDARD ACI HOOK ON END OF BAR INTO FOOTING. NUMBER, SIZE AND SPACING OF DOWELS SHALL MATCH WALL REINFORCING. DOWELS SHALL BE WIRE TIED AND NOT PUSHED INTO WET CONCRETE.

5. ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60 DEFORMED BARS. CENTER REINFORCING BARS IN BLOCK CELLS UNLESS OTHERWISE NOTED.

6. THE MASONRY CONTRACTOR SHALL BUILD, REINFORCE, AND GROUT THE WALLS IN NO GREATER THAN 4'-0" LIFTS, VIBRATING GROUT IMMEDIATELY AFTER EACH LIFT.

7. LAP ALL REINFORCING IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AT SPLICES. REFER TO CHART BELOW FOR SPLICE REQUIREMENTS. FULLY GROUT ALL REINFORCED CELLS.

REQUIRED STEEL REINFORCING BAR LAPS IN REINFORCED MASONRY (f'm = 1,500 PSI)

BAR SIZE	6" CMU	8" CMU	10" CMU	12" CMU
#3	19"	19"	19"	19"
#4	25"	25"	25"	25"
#5	40"	32"	32"	32"

8. PROVIDE GALVANIZED HORIZONTAL LADDER (EXTERIOR CONDITION)/TRUSS (INTERIOR CONDITION) TYPE JOINT REINFORCING WITH NO. 9 GAGE CROSS RODS AT 16" ON CENTER ON ALL WALLS.

9. DIMENSIONS SHOWN FOR CMU WALLS ARE NOMINAL BLOCK. HOLD DIMENSIONS TO OUTSIDE FACE OF CMU.

10. REFER TO ARCHITECTURAL DRAWINGS FOR ANY ADDITIONAL GROUTING REQUIREMENTS.

11. VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 192 BAR DIAMETERS OF THE REINFORCEMENT.

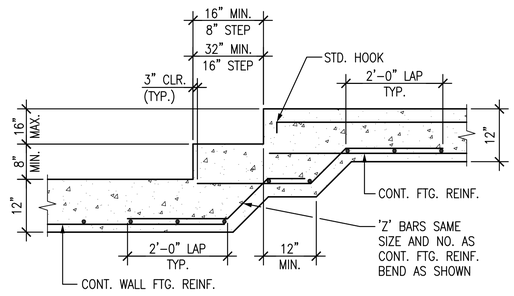
12. PROVIDE ONE VERTICAL BAR OF THE SIZE AS WALL REINFORCING AT CORNERS AND ENDS OF WALLS. REFER TO TYPICAL WALL REINFORCING DETAILS ON SHEET S2.01.

WOOD FRAMING NOTES:

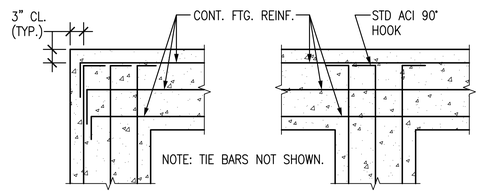
1. LUMBER SHALL BE NO. 2 SOUTHERN YELLOW PINE PRESERVATIVE TREATED AWPA UCI-13, UC2.

ABBREVIATIONS

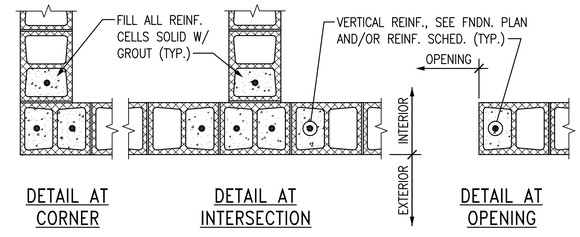
ACI	AMERICAN CONCRETE INSTITUTE	GA.	GAGE
ADDIT.	ADDITIONAL	GALV.	GALVANIZED
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	HORIZ.	HORIZONTAL
		INFO.	INFORMATION
ARCH.	ARCHITECTURAL	KSI	KIPS PER SQUARE INCH
ASTM	AMERICAN STANDARD FOR TESTING OF MATERIALS	LLH	LONG LEG HORIZONTAL
		LLV	LONG LEG VERTICAL
AWS	AMERICAN WELDING SOCIETY	LT.	LIGHT
BLDG.	BUILDING	L.W.	LONG WAY
B.O.	BOTTOM OF	MANUF.	MANUFACTURER
BOTT.	BOTTOM	MAS.	MASONRY
BRG.	BEARING	MAX.	MAXIMUM
CL	CENTERLINE	MIN.	MINIMUM
CLR.	CLEAR	MECH.	MECHANICAL
CMU	CONCRETE MASONRY UNIT	MTL.	METAL
COL.	COLUMN	o/c	ON CENTER
CONC.	CONCRETE	OPNG.	OPENING
CONN.	CONNECT/CONNECTION	OPP.	OPPOSITE
CONT.	CONTINUE/CONTINUOUS	PEJ	PREMOLDED EXPANSION JOINT
COORD.	COORDINATE	PROJ.	PROJECTION
DBL.	DOUBLE	PSF	POUNDS PER SQUARE FOOT
DEMO.	DEMOLISH/DEMOLITION	PSI	POUNDS PER SQUARE INCH
DET.	DETAIL	P.T.	PRESSURE TREATED
DIA.	DIAMETER	REINF.	REINFORCED/REINFORCING
DIAG.	DIAGONAL	REQ'D.	REQUIRED
DWGS.	DRAWINGS	SECT.	SECTION
EA.	EACH	SIM.	SIMILAR
E.F.	EACH FACE	STD.	STANDARD
E.W.	EACH WAY	STRUCT.	STRUCTURAL
ELEV.	ELEVATION	S.W.	SHORT WAY
EMBED.	EMBEDDED/EMBEDMENT	THK.	THICK
EQ.	EQUAL/EQUALLY	T.O.	TOP OF
EXIST.	EXISTING	TYP.	TYPICAL
F.F.	FINISHED FLOOR	U.O.N.	UNLESS OTHERWISE NOTED
FLR.	FLOOR	VERT.	VERTICAL
FNDN.	FOUNDATION	W.P.	WORKING POINT
FTG.	FOOTING	WWF	WELDED WIRE FABRIC
F.V.	FIELD VERIFY	W/	WITH



TYPICAL STEPPED FOOTING DETAIL
NOT TO SCALE



TYPICAL DETAIL AT FOOTING CORNERS AND INTERSECTIONS
NOT TO SCALE



TYPICAL WALL REINFORCING DETAILS
NOT TO SCALE

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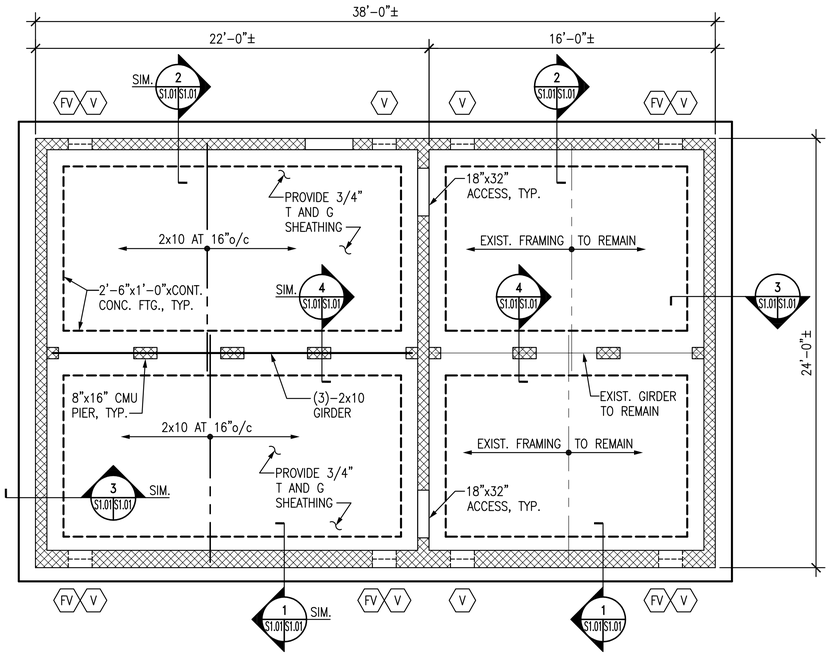
REVISIONS:		
NO.	DATE:	DESCRIPTION:
1	04/27/2016	CITY COMMENTS

McPHERSON DESIGN GROUP p.c.
STRUCTURAL ENGINEERS

114 BRIARWOOD DRIVE
HAMPTON, VIRGINIA

GENERAL NOTES

S0.01



FOUNDATION PLAN

1/4" = 1'-0"

NOTE:
THE EXISTING TOP OF THE LOWEST FLOOR IS 7.7 FEET. THE BASE FLOOD ELEVATION IN THIS AREA IS 9.0 FEET. THE PROPOSED SILL PLATE (TOP OF CMU) SHALL BE 3 FEET ABOVE THE BASE FLOOD ELEVATION OR 12.0 FEET. THE FLOOR SECTION (INCLUDES STRUCTURAL FRAMING AND HVAC DUCTWORK IF APPLICABLE)S APPROXIMATELY 1.5' (CONTRACTOR TO VERIFY). THE HOUSE WILL BE RAISED APPROXIMATELY 5.8 FEET. WITH A FINAL FINISHED FLOOR ELEVATION OF 13.5 FEET. (12.0' + 1.5').

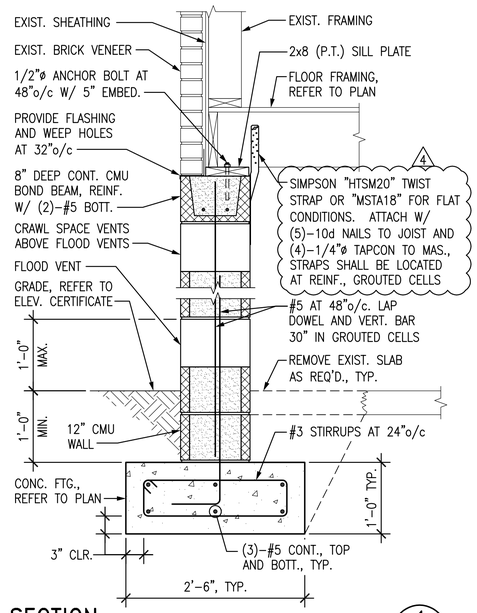
NOTE:
FLOOD VENTS — FV
CRAWL SPACE VENTS — V

NOTE:
THE EXACT LOCATION OF MASONRY PIERS SHALL BE COORDINATED WITH FRAMING BEARING POINTS ONCE THE HOUSE IS RAISED.

NOTE:
PROVIDE (3)-COURSE HIGH POCKETS AROUND LIFTING STEEL BEAMS.

NOTE:
THE CONTRACTOR IS TO REVIEW THE GEOTECHNICAL REPORT GENERATED BY GET SOLUTIONS, INC. STATING THAT SETTLEMENT IS TO BE EXPECTED. THE CONTRACTOR SHOULD FOLLOW THE RECOMMENDATIONS PUT FORTH IN THE JULY 01, 2015 REPORT. OWNER AND CONTRACTOR SHOULD BE INFORMED OF THE FUTURE SETTLEMENTS. THE CONTRACTOR SHALL CALL FOR INSPECTION PRIOR TO PLACING THE NEW FOUNDATIONS.

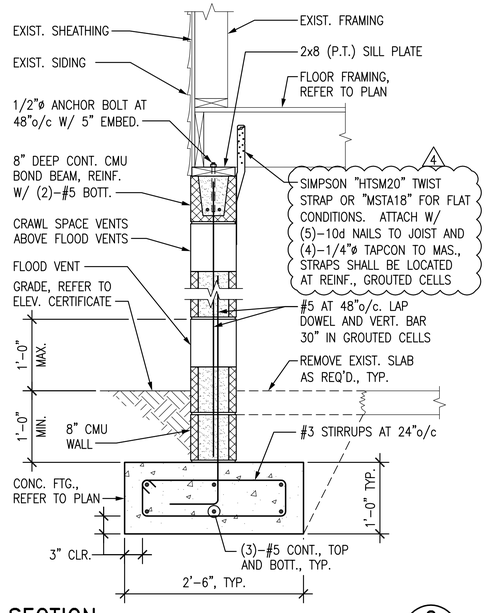
NOTE:
PER ENGINEERING CONCEPTS, INC., THERE WAS NO EVIDENCE OF HVAC DUCTWORK UNDER THE SLAB-ON-GRADE PORTION OF THIS HOUSE.



SECTION

1" = 1'-0'

1 S1.01|S1.01



SECTION

1" = 1'-0'

2 S1.01|S1.01

SECTION

1" = 1'-0'

3 S1.01|S1.01

SECTION

1" = 1'-0'

2 S1.01|S1.01

NOTE: IF THIS DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED.

GRAPHIC SCALE:

1/4" = 1'-0" 5' 0' 5' 10'

1" = 1'-0" 0 1'-0" 2'-0" 3'-0"

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3	10/17/2014	CITY COMMENTS

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STRUCTURAL ENGINEERS

114 BRIARWOOD DRIVE
HAMPTON, VIRGINIA

FOUNDATION PLAN AND SECTIONS

S1.01

SHEET 2 OF 2